Trautschold's collections in the Vernadsky State Geological Museum of the Russian Academy of Science (Moscow, Russia)

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Hermann (German) Trautschold (1817-1902) is an outstanding researcher of the Carboniferous, Jurassic and Cretaceous geology of central Russia. Three decades (1857-1888) he lived in Moscow and moved from tutor and lecturer of the German language to Professor of Geology of Peter's Agricultural University. All these years Trautschold was unceasing in palaeontological and stratigraphical researches.

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Biographical notes

Hermann Trautschold was born in Berlin in 1817. After graduation from a grammar school, he studied pharmacy for six years. He matriculated to the University of Berlin to study natural sciences. In Berlin he was the assistant of Link, a well-known botanist of that time. Moving to Hessen, he was engaged in chemistry, physics, mineralogy and crystallography. For about two years he was assistant in the laboratory of the well-known chemist Liebich. In 1846 he became Doctor of Philosophy of Hessen University.

He came to Russia for the first time in 1846 with the family of the rich Kostroma landowner Luginin, but in 1848 he returned to Germany, where he worked in a private higher educational institution till 1857. In 1857, Trautschold returned to Russia as tutor in the family of Akhlestyshev. He made annual excursions along the rivers Volga, Oka and Unzha in central Russia, paying paricular attention to the geology and palaeontology. From 1863 to 1868 he taught the German language in the physical-mathematical and medical faculties of Moscow University. In 1868, Trautschold was invited to join the faculty of mineralogy and geognosy of the Peter Agricultural and Forest Academy. From 1871 he was the professor of the Faculty of Geology of this Academy. In 1888, Trautschold retired and left Russia. First he moved to Breslau (nowadays Wroclaw, Poland), then to Freiberg and Karlsruhe (Germany). For biographical notes see Mitta & Starodubtseva (2002) and Starodubtseva & Mitta (2002).

Geological achievements

Hermann (German) Adol'fovich Trautschold (1817-1902) (Fig. 1) was a well-known naturalist of the second half of the 19th century, an expert on the Carboniferous and, especially, Jurassic and Cretaceous deposits of central Russia, particularly those in the vicinity of Moscow. He described many taxa, including sponges, corals, bryozoans, ammonites, crinoids, brachiopods and fishes; his descriptions are still used by modern researchers. Trautschold was the author of more than 160 scientific publications, which formed the base for further development of palaeontology and geology in Russia.

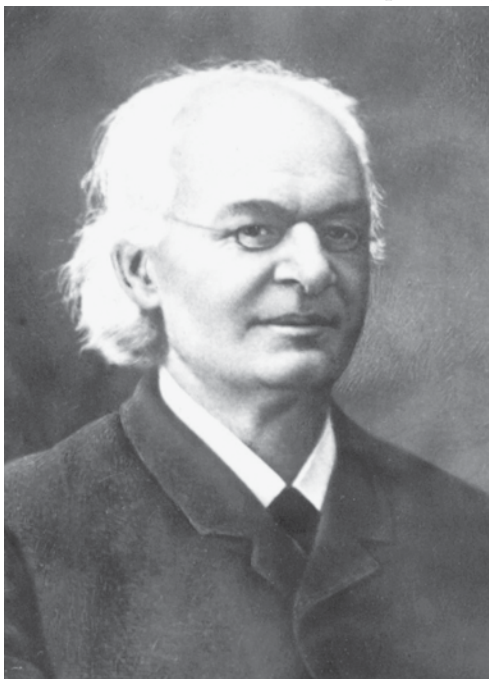

Fig. 1. Photograph of Hermann (German) Adol'fovich Trautschold (1817-1902) made in Moscow.

In articles devoted to fossils from Carboniferous deposits of Moscow vicinity, G.A. Trautschold has discovered (among others) new species of sea lilies; *Hydriocrinus pusillus, Cromyocrinus geminatus* [= *Moorecrinus geminatus*], *Cromyocrinus simplex, Poteriocrinus multiplex* [= *Moscovicrinus multiplex*], etc. He also described for the first time a gastropod mollusc parasitizing on sea lilies *Capulucus parasiticus* [= *Platiceras parasiticum*].

Trautschold's works devoted to the description of fossils from Jurassic and Lower Cretaceous deposits of Central Russia have doubtless merits. He has described about 250 species of fossils from these deposits. Some species of ammonites discovered by him, *Ringsteadia cuneata, Kachpurites fulgens, Craspedites subditus, Speetoniceras versicolor*, have become zonal indices for the Oxfordian, Volgian and Hauterivian stages. He has first described and figured the endocochlian cephalopod of the suborder Teuthoidea from Russia, whose imprints he had found in the neighborhoods of Simbirsk in Upper Jurassic shales and determined as *Coccoteuthis hastiformis* Rüppen [= *Trachiteuthis zhuravlevi* Hecker & Hecker] (Fig. 2).

In 1862, he has published the first coloured palaeogeographic maps of Russia under the title "Probable distribution of land and seas in Jurassic time for the European Russia, presented on the basis of geognostic maps by R. Murchison". The palaeogeographic map for the Late Jurassic in the "Atlas of lithological-palaeogeographical maps of the Russian platform and its geosynclinal frame" (Vinogradov, 1961) shows outlines of continents and seas similar to the maps published by Trautschold.

The Vernadsky State Geological Museum of the Russian Academy of Science (RAS) stores the collections of fossils described and drawn by Trautschold in his works (1861, 1866, 1871, 1874, 1876, 1879, 1877, 1879a, 1879b, 1886). The complete list of the

Fig. 2. *Coccoteuthis hastiformis* Rüppen [= *Trachyteuthis zhyravlevi* E. Hecker & R. Hecker]. Location: Russia, Ulyanovsk region, bank of Volga near Gorodische and Polivna (Jurassic, Volzhsky layer). Sample to paper by Trautschold (1866). Vernadsky State Geological Museum of RAS.

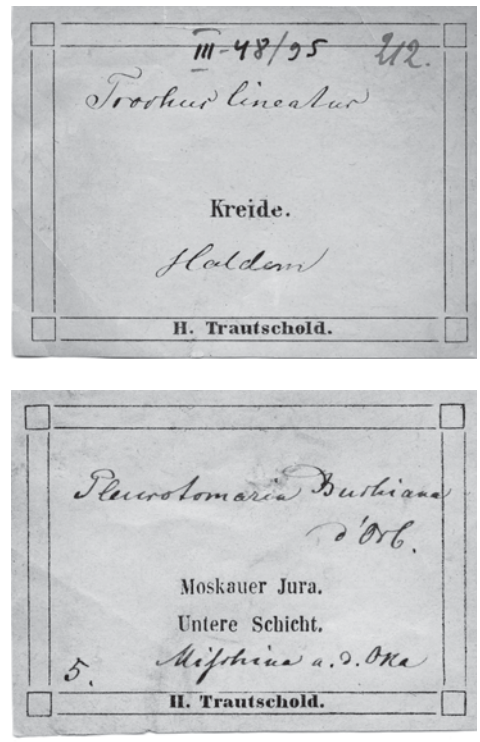

Fig. 3. Labels by G.A. Trautschold to the samples stored in the Vernadsky State Geological Museum of RAS.

specimens is published in a paper by Mitta & Starodubtseva (2002). The museum also has diverse specimens collected by Trautschold from the Carboniferous and Jurassic deposits located nearby Moscow and Mesozoic invertebrates from Europe (Fig. 3).

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